

*Hedaia horologica*, sp. n.

Long. corp. 35 millim.; exp. al. 81 millim.

*Female*.—Head free, light reddish brown in the middle, yellowish grey behind and below the eyes, on the front of the vertex, and on the sides and lower part of the face, the dark part terminating in a short blackish transverse stripe at the base of the labrum; pronotum light tawny, the sides subhyaline grey, mottled, spotted, and punctured with black; a black hourglass-shaped spot behind the middle, the front of which is occupied by two large punctures surrounded with black about the middle of the pronotum; abdomen tawny, blackish towards the extremity of the hinder segments above, paler and granulated with black below; a row of blackish sublateral spots both above and below. Tegmina yellowish grey, mottled with light ferruginous brown; covered part of the right tegmen broadly ferruginous. Wings brownish subhyaline, with whitish cross-nervures; costal area purplish brown.

*Hab.* Khasia Hills.

Allied to *H. procera*, Brunn. (*Borrei*, Sauss.), but has more superficial resemblance to *Molytria maculata* and *Shelfordi*, from which its free head, narrow wings, &c. amply distinguish it.

[To be continued.]

XXV.—*Notes on the Natural History of East Finmark.* By Canon A. M. NORMAN, M.A., D.C.L., LL.D., F.R.S., F.L.S.

[Continued from p. 128.]

## ANNELIDA POLYCHÆTA.

PROFESSOR M'INTOSH kindly determined for me many of the Polychæta which I collected; these included several species not previously recorded from this district. The list of Polychæta has been made as far as possible complete by adding the Annelida collected by M. Sars, Esmark, Danielssen, and others in this district. I have gone through a large number of papers with care. All that was known of Norwegian Polychæta up to 1894 as regards species, though not fully with respect to habitats, will be found in Olaf Bidentkap's

“Systematisk oversigt over Norges Annulata Polychæta,” Christ. Vidensk.-Selsk. Forhandl. 1894. Dr. Armauer Hansen’s Report on the Annelids in the Norwegian North-Atlantic Expedition also gives many Annelids of East Finmark from Stats. 160, 161, and 162.

The following particulars with regard to the distribution of Annelids on the Norwegian coast are derived from Bidekap’s lists:—

|                                                                 |     |
|-----------------------------------------------------------------|-----|
| 1. Total number of species of Polychæta known in Norway ..      | 207 |
| 2. Species found on the south coast .....                       | 118 |
| 3. Species found on the west coast up to Trondhjem .....        | 150 |
| 4. Species found in the Trondhjem Fjord .....                   | 94  |
| 5. Species found in the Lofoten Islands sea .....               | 97  |
| 6. Species in the whole of Norway north of the Lofoten Islands. | 108 |
| 7. Recorded here from East Finmark .....                        | 80  |

The areas represented by these figures are very variable in size, 4, 5, and 7 being much smaller than the others; 7 is, of course, a part, and only a very small part, of 6.

Twenty years ago G. W. R. Levisen published his “Systematisk-geografisk Oversigt over de nordiske Annulata, Gephyrea, Chætognathi og Balanoglossi” (Vidensk. Meddel. fra den naturh. Foren. i Kjöbenhavn, 1882 and 1883). Since that time additions have been made to the several faunas; but it remains the most recent summary of the annelidan fauna of the northern countries.

|                                  |     |
|----------------------------------|-----|
| Denmark .....                    | 138 |
| Sweden .....                     | 147 |
| Norway .....                     | 191 |
| Novaja Zembla and Kara Sea ..... | 97  |
| Siberia and Berings Strait ..... | 66  |
| Spitsbergen .....                | 82  |
| Faroe Islands.....               | 64  |
| Iceland .....                    | 71  |
| Greenland .....                  | 109 |
| North-east America .....         | 106 |

Unfortunately we have no recent complete work on British Polychæta or even anything like a catalogue of the species. At the present time many British species have merely been indicated by perhaps a few lines in the midst of a paragraph. The fullest local catalogues we have are those of Dr. J. F. Gemmill of the Clyde District\*, which contains 121

\* ‘Fauna, Flora, and Geology of the Clyde Area,’ Glasgow, 1901. (Published by Local Committee of the British Association.)

species, and of Dr. M'Intosh of the fauna of St. Andrews \*, which embraces 109 species. I made a MS. list of British species a few years ago, and, adding more recently described and recorded forms, I do not think I shall be far wrong if I estimate the British Polychæta at over 260.

*Harmothoe rarispina*, M. Sars.

—— *Sarsi*, Malmgren.

—— *nodosa*, M. Sars.

—— *imbricata*, Linné. In all the fiords.

*Lepidonotus squamatus*, Linné.

—— *cirrosus*, Pallas. Lang Fiord.

*Aphrodite aculeata*, Linné.

*Letmonice filiformis*, Kinberg.

*Leanira tetragona*, Örsted. N. N. A. Exped., St. 261.

*Eulalia viridis*, Müller. Vadsö; Lang Fiord, 2-5 fathoms.

*Phyllodoce maculata*, Müller.

*Nephtys Malmgreni*, Théel, = *M. longisetosa*, Malmgren. Bög Fiord, 100-125 fathoms.

—— *ciliata*, Müller. Klosterelv Fiord.

—— *Hobergi*, Aud. & Edw. N. N. A. Exped., Stat. 262.

*Glycera capitata* (Örsted), M. Sars. Bög Fiord, 100-125 fathoms.

—— *alba*, Rathke.

*Goniada norvegica*, Örsted. N. N. A. Exped., Stat. 261.

—— *maculata*, Örsted. See G. O. Sars, 'Bidrag til Kundskaben om Christianiafjordens Fauna,' iii. 1873, p. 30. "Vadsö."

*Lumbriconereis fragilis*, Müller. Varanger Fiord.

*Onuphis conchylega*, M. Sars. Varanger Fiord.

—— *hyperborea*, A. Hansen. Varanger Fiord, 100-125 fathoms.

*Ceratocephale Lovéni*, Malmgren.

*Nereis pelagica*, Linné. Klosterelv Fiord.

*Laodice norvegica* (Linn.), Savigny. Vadsö Harbour.

*Syllis Blomstrandii*, Malmgren.

—— *armillaris*, Örsted. Varanger Fiord.

*Ephesia gracilis*, H. Rathke. Varanger Fiord.

\* M'Intosh (W. C.), 'The Marine Invertebrates and Fishes of St. Andrews,' 1875, pp. 115-132.

- Spio cirratus*, M. Sars. Klosterelv Fiord, 3-5 fathoms.  
*Spiochætopterus typicus*, M. Sars.  
*Chætopterus norvegicus*, M. Sars.  
 \**Chaetogone setosa*, Malmgren. Svolvær, Lofoten Islands.  
*Cirratulus cirratus*, Müller. Klosterelv and Lang Fiords.  
*Scolophos armiger*, Müller. Klosterelv Fiord, 3-5 fathoms.  
*Ammotrypane aulogaster*, Rathke. Varanger Fiord.  
*Travisia Forbesi*, Johnston. Varanger Fiord.  
*Ophelia limacina*, Rathke.  
*Flabelligera affinis*, M. Sars.  
*Trophonia plumosa*, Müller.  
 — *hirsuta*, A. Hansen.  
 — *glauca*, Malmgren.  
*Brada villosa*, Rathke. Lang and Klosterelv Fiords.  
 — *granulata*, Malmgren. Lang Fiord, 15-25 fathoms.  
*Euphrosyne borealis*, Örsted.  
*Spinther arcticus*, M. Sars.  
*Scalibregma inflatum*, Rathke. Klosterelv Fiord.  
*Notomastus latericeus*, M. Sars. Svolvær, Lofoten Islands (*A. M. N.*);  
 Vadsö (*Danielssen*).  
*Arenicola marina*, Linné. Sydvaranger Fiord.  
*Olymene Mülleri*, M. Sars.  
 — *prætermissa*, Malmgren. N. N. A. Exped., Stat. 260.  
 — *gracilis*, M. Sars.  
*Nicomache lumbricalis*, Fabricius. Varanger Fiord.  
*Maldane biceps*, M. Sars.  
*Owenia assimilis*, M. Sars.  
*Pectinaria hyperborea*, Malmgren. Lang Fiord, 10-30 fathoms.  
 — *belgica*, Pallas.  
*Melinna cristata*, M. Sars.  
*Sabellides octocirrata*, M. Sars. N. N. A. Exped., Stat. 261.  
 — *borealis*, M. Sars. Klosterelv Fiord, 3-5 fathoms.  
*Amphiteis Gunneri*, M. Sars. Lang Fiord, 5-30 fathoms.  
*Leucariste albicans*, Malmgren.  
*Terebellides Strömii*, M. Sars. Klosterelv Fiord.  
*Thelepus circinnatus*, Fabricius. Varanger Fiord.  
*Amphitrite cirrata*, Müller. Varanger Fiord.  
 — *grænlantica*, Malmgren.  
*Terebella debilis*, Malmgren.  
*Leena abbranchiata*, Malmgren.

- Amphicora Fabricii*, Müller. Varanger Fiord.  
*Euchone papillosa*, M. Sars. Lang and Klosterelv Fiords.  
*Chone infundibuliformis*, Kröyer.  
*Dasychone infarcta*, Kröyer.  
*Sabella Fabricii*, Kröyer.  
*Potamilla neglecta*, M. Sars.  
 — *reniformis*, Müller.  
*Leptochone Steenstrupii*, Kröyer.  
*Filograna implexa*, Berkeley.  
*Apomatus globifer*, Lovén.  
*Potamocerus triqueter*, Mörch.  
*Placostegus tridentatus*, Fabricius.  
*Spirorbis borealis*, Linné.  
 — *spirillum*, Linné.  
 — *granulatus*, Linné.

## GEPHYREA.

## Fam. Sipunculidæ.

## Genus PHASCOLOSOMA, Leuckart.

*Phascolosoma eremita*, M. Sars.

1850. *Sipunculus eremita*, M. Sars, Mag. for Naturvid. p. 77, and Nyt Mag. f. Naturvid. 1857, p. 197.  
 1857. *Phascolosoma eremita*, Diesing, "Revision der Rhyngoden," Sitz. d. mathem.-naturw. Cl. der k. Akad. der Wiss. vol. xxxvii. p. 760.  
 1865. *Phascolosoma boreale*, Keferstein, Nachricht. d. k. Ges. d. Wiss. Göttingen, p. 206, and Zeitschr. f. wiss. Zool. vol. xv. 1865, p. 437, pl. xxxi. fig. 7, & pl. xxxiii. fig. 33.  
 1875. *Phascolosoma boreale*, Théel, Bihang till K. Svenska Vet.-Akad. Handl. vol. iii. no. 6, p. 10.  
 1877. *Phascolosoma eremita*, Koren & Danielssen, Fauna litt. Norvegiæ, pt. iii. p. 134, pl. xv. fig. 45.

Found at Vadsö and in Sydvaranger.

*Phascolosoma margaritaceum*, M. Sars.

1851. *Sipunculus margaritaceus*, M. Sars, Nyt Mag. for Naturvid. vol. vi. p. 196.  
 1865. *Phascolosoma margaritaceum*, Keferstein, Nachricht. d. k. Ges. d. Wiss. Göttingen, vol. iv. p. 201, and Zeitschr. f. wiss. Zool. p. 430, pl. xxxi. fig. 9, & pl. xxxii. figs. 28, 29.  
 1865. *Phascolosoma Ærstedii*, Keferstein, Nachricht. d. k. Ges. d. Wiss. Göttingen, p. 205, and Zeitschr. f. wiss. Zool. p. 436, pl. xxxi. fig. 8, & pl. xxxiii. fig. 39.  
 1871. *Phascolosoma Ærstedii*, Ehlers, Sitzungsber. d. phys.-med. Soc. zu Erlangen, vol. iv. p. 83.

1875. *Phascolosoma CErstedii*, Théel, Bihang till K. Sv. Vet.-Akad. Handl. vol. iii. no. 6, p. 9.

1877. *Phascolosoma margaritaceum*, Koren & Danielssen, Fauna littoralis Norvegiæ, pt. iii. p. 135, pl. xv. figs. 43, 44.

In 100-120 fathoms, Bög Fiord.

*Phascolosoma albidum* and *Phascolosoma fulgens* of Théel are also referable to this species.

### Genus PHASCOLION, Théel.

#### *Phascolion Strombi* (Montagu).

I lump under this name a number of forms varying in size, amount of development of tubercles of the surface, &c. The genus requires more careful working out than it has hitherto received, notwithstanding the papers of Théel and others. Some of the East-Finmark specimens are referable to var. *verrucosa*, Kor. & Dan. *Phascolion* was found inhabiting tubes of *Serpula* and shells of *Trophon truncatus*, *Admete viridula*, *Pyrene rosacea*, *Bela* (species), *Machæroplax verrucosa*, *Margarita grænlandica*, young *Fusi*, *Dentalium*, *Trichotropis*, *Cylichna alba*, and *Lacuna quadrifasciata*.

### Fam. Priapulidæ.

#### Genus PRIAPULUS, Lamarck.

\**Priapulus caudatus*, Lamarck.

I dredged this species at Svolvær, Lofoten Islands, but not at East Finmark.

#### Genus PRIAPULOPSIS, Koren & Danielssen, 1875.

#### *Priapulopsis typicus*, Koren & Danielssen.

1868. *Priapulus bicaudatus*, Danielssen, Forhand. Skand. Naturforsk. tiend Möde, p. 542 (*vide* Kor. & Dan.).

1875. *Priapulopsis typicus*, Koren & Danielssen, "Bidrag til de norske Gephyreers Naturhistorie," Nyt Mag. Naturf. vol. xxi. p. 28 (separate copy).

1877. *Priapuloides typicus*, Koren & Danielssen, Fauna litt. Norvegiæ, pt. iii. p. 147, pl. xvi. figs. 10-14.

1881. *Priapuloides typicus*, Danielssen & Koren, Norwegian North-Atlantic Exped. 1876-1878, Gephyrea, p. 13, pl. iii. figs. 1-12, & p. 147.

The two type specimens described in the 'Fauna littoralis Norvegiæ' were found in the Varanger Fiord in 120 fathoms on a clay bottom. It was taken in the same district by the Norwegian North-Atlantic Expedition at Stat. 262, lat.



70° 36' N., long. 32° 35' E., in 148 fathoms. Koren and Danielssen, when they instituted *Priapuloides*, appear to have forgotten that they had previously named the genus *Priapulopsis*.

### Genus HALICRYPTUS, Siebold, 1849.

#### *Halicryptus spinulosus*, Siebold.

1849. *Halicryptus spinulosus*, Siebold, Neue preuss. Provinzialblätter, Königsberg, vol. vii. p. 184.  
 1859. *Halicryptus spinulosus*, Diesing, "Revision der Rhyngoden," Sitzb. d. mathem.-naturw. Cl. xxxvii. Bd. no. 21, p. 779.  
 1862. *Halicryptus spinulosus*, Siebold, Zeitschr. f. wiss. Zool. vol. xi. p. 413.  
 1862. *Halicryptus spinulosus*, Ehlers, Zeitschr. f. wiss. Zool. vol. xi. p. 401, pl. xxiv.  
 1870. *Halicryptus spinulosus*, Säger, "The Baltic Representatives of *Gephyrea*; *Halicryptus* and *Priapulus*," Trans. Second Congress of Russian Naturalists in Moscow, p. 207 (in Russian).  
 1871. *Halicryptus spinulosus*, Willemoës-Suhm, Zeitschr. f. wiss. Zool. vol. xxi. p. 385.  
 1871. *Halicryptus spinulosus*, Willemoës-Suhm, Ann. & Mag. Nat. Hist. ser. 4, vol. viii. p. 143.  
 1871. *Halicryptus spinulosus*, Ehlers, Sitzungsbericht d. phys.-med. Soc. zu Erlangen, vol. iii. p. 84.  
 1885. *Halicryptus spinulosus*, Apel, Beitrag zur Anat. und Histol. des *Priapulus caudatus* und des *Halicryptus spinulosus*.  
 1885. *Halicryptus spinulosus*, Scharff, "Skin and Nervous System of *Priapulus* and *Halicryptus*," Quart. Journ. Micros. Sci. n. s. vol. xxv. p. 193, pl. xiv. figs. 3, 4, 5, 11.

Not uncommon; dug between tide-marks in Klosterelv Fiord. So far as I am aware it has not previously been found in Norway. Its localities are best given by Théel as Spitsbergen and the Baltic, where it occurs not further north than Brävikén or further south than Ystad (Théel, "Etudes sur les Géphyriens inermes des Mers de la Skandinavie, du Spitsberg et du Groënland," Bihang till K. Svensk. Vet.-Akad. Handl. vol. iii. 1876, p. 24).

[To be continued.]

### BIBLIOGRAPHICAL NOTICE.

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THERE is no occasion to repeat what has already been published in these columns (Ann. & Mag. Nat. Hist. ser. 7, vol. ix. (1902) p. 75),